

09/988829

Sub
B3

ABSTRACT OF THE DISCLOSURE

Provided is a bevel gear unit with continuous gearing adjustment, for which the contact pressure between the bevel gear pairs and the traction means is generated hydraulically on one gear unit side and mechanically, with the aid of a spring, on the other gear unit side. For this, the second gear unit side is provided with an axially fixed bevel gear and an axially movable bevel gear with extended hub, wherein the bevel gears are connected so as to rotate jointly on their gear unit shaft and are coupled to the shaft via a contact pressure mechanism that depends on the rotational moment or a rotational moment and the gearing. The contact pressure mechanism consists of a cam sleeve that is fixed relative to the shaft, a cam sleeve formed by the free end of the hub and roll bodies for the force transmittal, which are inserted between opposite arranged cam curves and rotate around axes extending radial to the gear unit shaft. The roll bodies are guided by rings and are held at a mutual distance to each other and with spring force in the axial center region between the cam sleeves, wherein the spring is arranged coaxial on the extended hub.